Chih-Ming Ho

List of Publications by Citations

240 papers	13,339 citations	60 h-index	110 g-index
279 ext. papers	15,045 ext. citations	5.2 avg, IF	6.37 L-index

#	Paper	IF	Citations
240	MICRO-ELECTRO-MECHANICAL-SYSTEMS (MEMS) AND FLUID FLOWS. *Annual Review of Fluid Mechanics*, **1998**, 30, 579-612	22	980
239	Linear artificial molecular muscles. *Journal of the American Chemical Society*, **2005**, 127, 9745-59	16.4	617
238	Subharmonics and vortex merging in mixing layers. *Journal of Fluid Mechanics*, **1982**, 119, 443-473	3.7	563
237	Vortex induction and mass entrainment in a small-aspect-ratio elliptic jet. *Journal of Fluid Mechanics* , **1987**, 179, 383-405	3.7	397
236	Surface molecular property modifications for poly(dimethylsiloxane) (PDMS) based microfluidic devices. *Microfluidics and Nanofluidics*, **2009**, 7, 291-306	2.8	367
235	Dynamics of an impinging jet. Part 1. The feedback phenomenon. *Journal of Fluid Mechanics*, **1981**, 105, 119	3.7	345
234	Effective slip and friction reduction in nanograted superhydrophobic microchannels. *Physics of Fluids*, **2006**, 18, 087105	4.4	338
233	Interleukin 6 and interleukin 8 as potential biomarkers for oral cavity and oropharyngeal squamous cell carcinoma. *JAMA Otolaryngology*, **2004**, 130, 929-35		302
232	Unsteady aerodynamics and flow control for flapping wing flyers. *Progress in Aerospace Sciences*, **2003**, 39, 635-681	8.8	272
231	Transport of bubbles in square microchannels. *Physics of Fluids*, **2004**, 16, 4575-4585	4.4	265
230	Minimal size of coffee ring structure. *Journal of Physical Chemistry B*, **2010**, 114, 5269-74	3.4	264
229	Nanochromatography driven by the coffee ring effect. *Analytical Chemistry*, **2011**, 83, 1871-3	7.8	229
228	Rapid electrochemical detection on a mobile phone. *Lab on A Chip*, **2013**, 13, 2950-5	7.2	215
227	Aptamer-based optical probes with separated molecular recognition and signal transduction modules. *Journal of the American Chemical Society*, **2008**, 130, 2380-1	16.4	198
226	Scaling law in liquid drop coalescence driven by surface tension. *Physics of Fluids*, **2004**, 16, L51-L54	4.4	193
225	A nanomechanical device based on linear molecular motors. *Applied Physics Letters*, **2004**, 85, 5391-5393	3.4	189
224	Electrochemical sensor for multiplex biomarkers detection. *Clinical Cancer Research*, **2009**, 15, 4446-52	12.9	180

223	Electrokinetics in micro devices for biotechnology applications. *IEEE/ASME Transactions on Mechatronics*, **2004**, 9, 366-376	5.5	176
222	Small-scale transition in a plane mixing layer. *Journal of Fluid Mechanics*, **1990**, 210, 475-500	3.7	171
221	REVIEW: MEMS and Its Applications for Flow Control. *Journal of Fluids Engineering, Transactions of the ASME*, **1996**, 118, 437-447	2.1	169
220	A MEMS based amperometric detector for E. coli bacteria using self-assembled monolayers. *Biosensors and Bioelectronics*, **2001**, 16, 745-55	11.8	157
219	Unsteady separation in a boundary layer produced by an impinging jet. *Journal of Fluid Mechanics*, **1985**, 160, 235-256	3.7	156
218	Cell Separation by Non-Inertial Force Fields in Microfluidic Systems. *Mechanics Research Communications*, **2009**, 36, 92-103	2.2	151
217	Electrokinetic bioprocessor for concentrating cells and molecules. *Analytical Chemistry*, **2004**, 76, 6908-14	7.8	139
216	Closed-loop control of cellular functions using combinatory drugs guided by a stochastic search algorithm. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 5105-10	11.5	137
215	Titanium-alloy MEMS wing technology for a micro aerial vehicle application. *Sensors and Actuators A: Physical*, **2001**, 89, 95-103	3.9	137
214	An optimized small molecule inhibitor cocktail supports long-term maintenance of human embryonic stem cells. *Nature Communications*, **2011**, 2, 167	17.4	130
213	Detection of picomolar levels of interleukin-8 in human saliva by SPR. *Lab on A Chip*, **2005**, 5, 1017-23	7.2	122
212	Lift Force of Delta Wings. *Applied Mechanics Reviews*, **1990**, 43, 209-221	8.6	118
211	Monocyte recruitment to endothelial cells in response to oscillatory shear stress. *FASEB Journal*, **2003**, 17, 1648-57	0.9	115
210	A micromachined flow shear-stress sensor based on thermal transfer principles. *Journal of Microelectromechanical Systems*, **1999**, 8, 90-99	2.5	115
209	A chaotic mixer for magnetic bead-based micro cell sorter. *Journal of Microelectromechanical Systems*, **2004**, 13, 779-790	2.5	108
208	DNA diagnostics: nanotechnology-enhanced electrochemical detection of nucleic acids. *Pediatric Research*, **2010**, 67, 458-68	3.2	106
207	Bubble dispenser in microfluidic devices. *Physical Review E*, **2005**, 72, 037302	2.4	105
206	Mechanical Shuttling of Linear Motor-Molecules in Condensed Phases on Solid Substrates. *Nano Letters*, **2004**, 4, 2065-2071	11.5	101

205	Single-molecule tracing on a fluidic microchip for quantitative detection of low-abundance nucleic acids. *Journal of the American Chemical Society*, **2005**, 127, 5354-9	16.4	97
204	Dependence of macroscopic wetting on nanoscopic surface textures. *Langmuir*, **2009**, 25, 12851-4	4	95
203	Two-phase flow in microchannels with surface modifications. *Fluid Dynamics Research*, **2006**, 38, 772-786	1.2	93
202	A flexible micromachine-based shear-stress sensor array and its application to separation-point detection. *Sensors and Actuators A: Physical*, **2000**, 79, 194-203	3.9	92
201	Flexible shear-stress sensor skin and its application to unmanned aerial vehicles. *Sensors and Actuators A: Physical*, **2003**, 105, 321-329	3.9	90
200	Rapid optimization of drug combinations for the optimal angiostatic treatment of cancer. *Angiogenesis*, **2015**, 18, 233-44	10.6	85
199	Coffee ring aptasensor for rapid protein detection. *Langmuir*, **2013**, 29, 8440-6	4	84
198	The pitching delta wing. *AIAA Journal*, **1985**, 23, 1660-1665	2.1	84
197	Deformation of DNA molecules by hydrodynamic focusing. *Journal of Fluid Mechanics*, **2003**, 497, 55-65	3.7	83
196	Evaluation of synthetic linear motor-molecule actuation energetics. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 8583-8	11.5	81
195	Left-right symmetry breaking in tissue morphogenesis via cytoskeletal mechanics. *Circulation Research*, **2012**, 110, 551-9	15.7	80
194	IC-integrated flexible shear-stress sensor skin. *Journal of Microelectromechanical Systems*, **2003**, 12, 740-747	2.5	80
193	Mechanism-independent optimization of combinatorial nanodiamond and unmodified drug delivery using a phenotypically driven platform technology. *ACS Nano*, **2015**, 9, 3332-44	16.7	77
192	Bio/abiotic interface constructed from nanoscale DNA dendrimer and conducting polymer for ultrasensitive biomolecular diagnosis. *Small*, **2009**, 5, 1784-90	11	76
191	Micromachined membrane particle filters. *Sensors and Actuators A: Physical*, **1999**, 73, 184-191	3.9	76
190	Aptamer-based electrochemical biosensor for Botulinum neurotoxin. *Analytical and Bioanalytical Chemistry*, **2009**, 393, 1943-8	4.4	72
189	Enabling Technologies for Personalized and Precision Medicine. *Trends in Biotechnology*, **2020**, 38, 497-518	13.1	71
188	Individualizing liver transplant immunosuppression using a phenotypic personalized medicine platform. *Science Translational Medicine*, **2016**, 8, 333ra49	17.5	71

187	Dynamics of an impinging jet. Part 2. The noise generation. *Journal of Fluid Mechanics*, **1982**, 116, 379-391	3.7	71
186	Optical protein sensor for detecting cancer markers in saliva. *Biosensors and Bioelectronics*, **2008**, 24, 266-71	11.8	68
185	Optimization of drug combinations using Feedback System Control. *Nature Protocols*, **2016**, 11, 302-15	18.8	67
184	4-Dimensional light-sheet microscopy to elucidate shear stress modulation of cardiac trabeculation. *Journal of Clinical Investigation*, **2016**, 126, 1679-90	15.9	67
183	A self-pumping lab-on-a-chip for rapid detection of botulinum toxin. *Lab on A Chip*, **2010**, 10, 2265-70	7.2	61
182	A high-resolution high-frequency monolithic top-shooting microinjector free of satellite drops - part I: concept, design, and model. *Journal of Microelectromechanical Systems*, **2002**, 11, 427-436	2.5	61
181	A streamlined search technology for identification of synergistic drug combinations. *Scientific Reports*, **2015**, 5, 14508	4.9	60
180	Electrochemical detection of low-copy number salivary RNA based on specific signal amplification with a hairpin probe. *Nucleic Acids Research*, **2008**, 36, e65	20.1	57
179	An electrochemical detection scheme for identification of single nucleotide polymorphisms using hairpin-forming probes. *Nucleic Acids Research*, **2002**, 30, e55	20.1	57
178	Endothelial cell dynamics under pulsating flows: significance of high versus low shear stress slew rates (d(tau)/dt). *Annals of Biomedical Engineering*, **2002**, 30, 646-56	4.7	56
177	Output-driven feedback system control platform optimizes combinatorial therapy of tuberculosis using a macrophage cell culture model. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E2172-9	11.5	55
176	Systematic quantitative characterization of cellular responses induced by multiple signals. *BMC Systems Biology*, **2011**, 5, 88	3.5	53
175	Rapid, electrical impedance detection of bacterial pathogens using immobilized antimicrobial peptides. *Journal of the Association for Laboratory Automation*, **2014**, 19, 42-9		51
174	Unsteady vortical flow around three-dimensional lifting surfaces. *AIAA Journal*, **1986**, 24, 713-721	2.1	50
173	Cardiac Light-Sheet Fluorescent Microscopy for Multi-Scale and Rapid Imaging of Architecture and Function. *Scientific Reports*, **2016**, 6, 22489	4.9	48
172	The Oral Fluid MEMS/NEMS Chip (OFMNC): diagnostic and translational applications. *Advances in Dental Research*, **2005**, 18, 3-5	2.3	47
171	A MEMS thermopneumatic silicone rubber membrane valve. *Sensors and Actuators A: Physical*, **1998**, 64, 101-108	3.9	46
170	Reconfigurable hydrophobic/hydrophilic surfaces in microelectromechanical systems (MEMS). *Journal of Micromechanics and Microengineering*, **2004**, 14, 91-95	2	46

169	Guiding the osteogenic fate of mouse and human mesenchymal stem cells through feedback system control. *Scientific Reports*, **2013**, 3, 3420	4.9	44
168	High aerodynamic loads on an airfoil submerged in an unsteady stream. *AIAA Journal*, **1992**, 30, 1117-1119	4.1	44
167	Visualization of a forced elliptic jet. *AIAA Journal*, **1986**, 24, 684-685	2.1	44
166	Optimizing drug combinations against multiple myeloma using a quadratic phenotypic optimization platform (QPOP). *Science Translational Medicine*, **2018**, 10,	17.5	43
165	A micro-electro-mechanical-system-based thermal shear-stress sensor with self-frequency compensation. *Measurement Science and Technology*, **1999**, 10, 687-696	2	41
164	Molecular effects on boundary condition in micronanoliquid flows. *Physics of Fluids*, **2008**, 20, 101512	4.4	40
163	A high-resolution high-frequency monolithic top-shooting microinjector free of satellite drops - part II: fabrication, implementation, and characterization. *Journal of Microelectromechanical Systems*, **2002**, 11, 437-447	2.5	39
162	Chaotic Mixing In Electrokinetically And Pressure Driven Micro Flows **2001**, 185-191		39
161	Efficient dielectrophoretic patterning of embryonic stem cells in energy landscapes defined by hydrogel geometries. *Annals of Biomedical Engineering*, **2010**, 38, 3777-88	4.7	38
160	Photolithographic patterning of organosilane monolayer for generating large area two-dimensional B lymphocyte arrays. *Lab on A Chip*, **2008**, 8, 2105-12	7.2	38
159	Modulating BET Bromodomain Inhibitor ZEN-3694 and Enzalutamide Combination Dosing in a Metastatic Prostate Cancer Patient Using CURATE.AI, an Artificial Intelligence Platform. *Advanced Therapeutics*, **2018**, 1, 1800104	4.9	38
158	Serum creatinine detection by a conducting-polymer-based electrochemical sensor to identify allograft dysfunction. *Analytical Chemistry*, **2012**, 84, 7933-7	7.8	37
157	Experiments and simulations of MEMS thermal sensors for wall shear-stress measurements in aerodynamic control applications. *Journal of Micromechanics and Microengineering*, **2004**, 14, 1640-1649	2	37
156	Application of fractional factorial designs to study drug combinations. *Statistics in Medicine*, **2013**, 32, 307-18	2.3	36
155	Cascade search for HSV-1 combinatorial drugs with high antiviral efficacy and low toxicity. *International Journal of Nanomedicine*, **2012**, 7, 2281-92	7.3	36
154	Cell relaxation after electrodeformation: effect of latrunculin A on cytoskeletal actin. *Journal of Biomechanics*, **2005**, 38, 529-35	2.9	36
153	A Methanol-Tolerant Gas-Venting Microchannel for a Microdirect Methanol Fuel Cell. *Journal of Microelectromechanical Systems*, **2007**, 16, 1403-1410	2.5	35
152	Statistical analysis on wall shear stress of turbulent boundary layer in a channel flow using micro-shear stress imager. *International Journal of Heat and Fluid Flow*, **2000**, 21, 576-581	2.4	35

151	Out-of-plane magnetic actuators with electroplated permalloy for fluid dynamics control. *Sensors and Actuators A: Physical*, **1999**, 78, 190-197	3.9	35
150	Experimental study and nonlinear dynamic analysis of time-periodic micro chaotic mixers. *Journal of Fluid Mechanics*, **2007**, 575, 425-448	3.7	34
149	Improved micro thermal shear-stress sensor. *IEEE Transactions on Instrumentation and Measurement* , **1996**, 45, 570-574	5.2	33
148	Effective drug combination for nematodes discovered by output-driven feedback system control technique. *Science Advances*, **2017**, 3, eaao1254	14.3	32
147	Unsteady flow around an ogive cylinder. *Journal of Aircraft*, **1986**, 23, 520-528	1.6	32
146	Drug regimens identified and optimized by output-driven platform markedly reduce tuberculosis treatment time. *Nature Communications*, **2017**, 8, 14183	17.4	31
145	Branching patterns emerge in a mathematical model of the dynamics of lung development. *Journal of Physiology*, **2014**, 592, 313-24	3.9	30
144	Three-Dimensional Recirculation Flow in a Backward Facing Step. *Journal of Fluids Engineering, Transactions of the ASME*, **1994**, 116, 228-232	2.1	30
143	Developing defined culture systems for human pluripotent stem cells. *Regenerative Medicine*, **2011**, 6, 623-34	2.5	29
142	Microsensors and actuators for macrofluidic control. *IEEE Sensors Journal*, **2004**, 4, 494-502	4	28
141	Robust Vortex Control of a Delta Wing by Distributed Microelectromechanical-Systems Actuators. *Journal of Aircraft*, **2000**, 37, 697-706	1.6	28
140	Directing tissue morphogenesis via self-assembly of vascular mesenchymal cells. *Biomaterials*, **2012** , 33, 9019-26	15.6	27
139	Micro sensors: linking real-time oscillatory shear stress with vascular inflammatory responses. *Annals of Biomedical Engineering*, **2004**, 32, 189-201	4.7	27
138	Sensors and actuators on non-planar substrates. *Sensors and Actuators A: Physical*, **1999**, 73, 80-88	3.9	27
137	Effects of time scales on lift of airfoils in an unsteady stream. *AIAA Journal*, **1994**, 32, 797-801	2.1	27
136	Micromachined Particle Filter With Low Power Dissipation. *Journal of Fluids Engineering, Transactions of the ASME*, **2001**, 123, 899-908	2.1	26
135	Measurements of wall shear stress of a turbulent boundary layer using a micro-shear-stress imaging chip. *Fluid Dynamics Research*, **1999**, 24, 329-342	1.2	26
134	Subvoxel light-sheet microscopy for high-resolution high-throughput volumetric imaging of large biomedical specimens. *Advanced Photonics*, **2019**, 1, 1	8.1	26

133	Identification and Optimization of Combinatorial Glucose Metabolism Inhibitors in Hepatocellular Carcinomas. *Journal of the Association for Laboratory Automation*, **2015**, 20, 423-37		25
132	A dielectrophoretic chaotic mixer		25
131	Use of Fractional Factorial Designs in Antiviral Drug Studies. *Quality and Reliability Engineering International*, **2013**, 29, 299-304	2.6	24
130	Discovery of a low order drug-cell response surface for applications in personalized medicine. *Physical Biology*, **2014**, 11, 065003	3	24
129	Rapidly optimizing an aptamer based BoNT sensor by feedback system control (FSC) scheme. *Biosensors and Bioelectronics*, **2011**, 30, 174-9	11.8	24
128	Control of global instability in a non-parallel near wake. *Journal of Fluid Mechanics*, **2000**, 404, 345-378	3.7	24
127	Vortex Dynamics of Delta Wings. *Lecture Notes in Engineering*, **1989**, 365-427		24
126	Continuous sorting of heterogeneous-sized embryoid bodies. *Lab on A Chip*, **2010**, 10, 1678-82	7.2	23
125	Surface initiated actin polymerization from top-down manufactured nanopatterns. *Soft Matter*, **2007**, 3, 541-546	3.6	23
124	Formation of high electromagnetic gradients through a particle-based microfluidic approach. *Journal of Micromechanics and Microengineering*, **2007**, 17, 1299-1306	2	23
123	Compact plane illumination plugin device to enable light sheet fluorescence imaging of multi-cellular organisms on an inverted wide-field microscope. *Biomedical Optics Express*, **2016**, 7, 194-208	3.5	22
122	Optimizing combinations of flavonoids deriving from astragali radix in activating the regulatory element of erythropoietin by a feedback system control scheme. *Evidence-based Complementary and Alternative Medicine*, **2013**, 2013, 541436	2.3	22
121	An unsteady microfluidic T-form mixer perturbed by hydrodynamic pressure. *Journal of Micromechanics and Microengineering*, **2008**, 18, 45015	2	22
120	Phase decorrelation of coherent structures in a free shear layer. *Journal of Fluid Mechanics*, **1991**, 230, 319-337	3.7	22
119	An agar gel membrane-PDMS hybrid microfluidic device for long term single cell dynamic study. *Lab on A Chip*, **2010**, 10, 2710-9	7.2	21
118	Wetting behaviors of individual nanostructures. *Langmuir*, **2009**, 25, 6599-603	4	21
117	Integrative systems control approach for reactivating Kaposi's sarcoma-associated herpesvirus (KSHV) with combinatory drugs. *Integrative Biology (United Kingdom)*, **2009**, 1, 123-30	3.7	21
116	Bandgap-assisted surface-plasmon sensing. *Applied Optics*, **2007**, 46, 3369-75	1.7	21

115	Optimizing Combination Therapy for Acute Lymphoblastic Leukemia Using a Phenotypic Personalized Medicine Digital Health Platform: Retrospective Optimization Individualizes Patient Regimens to Maximize Efficacy and Safety. *SLAS Technology*, **2017**, 22, 276-288	3	20
114	Compact Wireless Microscope for In-Situ Time Course Study of Large Scale Cell Dynamics within an Incubator. *Scientific Reports*, **2015**, 5, 18483	4.9	20
113	Pressure Drops of Water Flow Through Micromachined Particle Filters. *Journal of Fluids Engineering, Transactions of the ASME*, **2002**, 124, 1053-1056	2.1	20
112	Near-field pressure fluctuations of an elliptic jet. *AIAA Journal*, **1985**, 23, 354-358	2.1	20
111	In vitro reconstruction of branched tubular structures from lung epithelial cells in high cell concentration gradient environment. *Scientific Reports*, **2015**, 5, 8054	4.9	18
110	Nanomanufacturing and characterization modalities for bio-nano-informatics systems. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 875-91	1.3	18
109	Understanding and harnessing biomimetic molecular machines for NEMS actuation materials. *IEEE Transactions on Automation Science and Engineering*, **2006**, 3, 254-259	4.9	18
108	Temperature fluctuations in a turbulent flame. *Combustion and Flame*, **1976**, 27, 113-123	5.3	18
107	Creation of functional micro/nano systems through top-down and bottom-up approaches. *MCB Molecular and Cellular Biomechanics*, **2009**, 6, 1-55	1.2	18
106	A novel combination of four flavonoids derived from Astragali Radix relieves the symptoms of cyclophosphamide-induced anemic rats. *FEBS Open Bio*, **2017**, 7, 318-323	2.7	17
105	A Micromachined Permalloy Magnetic Actuator Array for Micro Robotics Assembly Systems		17
104	Vortex breakdown over delta wings in unsteady freestream. *AIAA Journal*, **1994**, 32, 433-436	2.1	16
103	Artificial intelligence enabled parabolic response surface platform identifies ultra-rapid near-universal TB drug treatment regimens comprising approved drugs. *PLoS ONE*, **2019**, 14, e0215607	3.7	15
102	The Mixing Layer Forced by Fundamental and Subharmonic **1985**, 385-395		15
101	On-Chip Continuous Blood Cell Subtype Separation by Deterministic Lateral Displacement **2007**,		14
100	Fabrication process of microsurgical tools for single-cell trapping and intracytoplasmic injection. *Journal of Microelectromechanical Systems*, **2004**, 13, 940-946	2.5	14
99	A magnetic force driven chaotic micro-mixer		14
98	Unsteady Wake of a Plunging Airfoil. *AIAA Journal*, **1981**, 19, 1492-1494	2.1	14

97	Acoustical shadowgraph. *Physics of Fluids*, **1976**, 19, 1118		14
96	Preclinical optimization of a broad-spectrum anti-bladder cancer tri-drug regimen via the Feedback System Control (FSC) platform. *Scientific Reports*, **2015**, 5, 11464	4.9	13
95	Applications of MEMS devices to delta wing aircraft - From concept development to transonic flight test **2001**,		13
94	Surface micromachined magnetic actuators		13
93	Local and Global Dynamics of Free Shear Layers **1982**, 521-533		13
92	Ultrasonication on a microfluidic chip to lyse single and multiple Pseudo-nitzschia for marine biotoxin analysis. *Biotechnology Journal*, **2011**, 6, 150-5	5.6	12
91	A MEMS thermopneumatic silicone membrane valve		12
90	A surface-micromachined shear stress imager		12
89	Vorticity dynamics of 2-D and 3-D wings in unsteady free stream **1991**,		12
88	Patterns of periodic holes created by increased cell motility. *Interface Focus*, **2012**, 2, 457-64	3.9	11
87	Silicone polymer chemical vapor sensors fabricated by direct polymer patterning on substrate technique (DPPOST). *Sensors and Actuators B: Chemical*, **2006**, 116, 2-10	8.5	11
86	Unsteady Kutta Condition of a Plunging Airfoil **1981**, 197-206		11
85	Ultra-rapid near universal TB drug regimen identified via parabolic response surface platform cures mice of both conventional and high susceptibility. *PLoS ONE*, **2018**, 13, e0207469	3.7	11
84	Directing three-dimensional multicellular morphogenesis by self-organization of vascular mesenchymal cells in hyaluronic acid hydrogels. *Journal of Biological Engineering*, **2017**, 11, 12	6.3	10
83	A parametrized three-dimensional model for MEMS thermal shear-stress sensors. *Journal of Microelectromechanical Systems*, **2005**, 14, 625-633	2.5	10
82	Multilayer SU-8 based microdispenser for microarray assay. *Sensors and Actuators A: Physical*, **2006**, 132, 714-725	3.9	10
81	Analog VLSI system for active drag reduction. *IEEE Micro*, **1996**, 16, 53-59	1.8	10
80	Vortex breakdown over delta wings in unsteady free stream **1993**,		10

79	Evolution of Coherent Structures in a Lip Jet **1983**, 121-136		10
78	A UV-sensitive hydrogel based combinatory drug delivery chip (UV gel-Drug Chip) for cancer cocktail drug screening. *RSC Advances*, **2016**, 6, 44425-44434	3.7	10
77	Control of Kaposi's sarcoma-associated herpesvirus reactivation induced by multiple signals. *PLoS ONE*, **2011**, 6, e20998	3.7	9
76	MEMS - A technology for advancements in aerospace engineering **1997**,		9
75	An integrated MEMS system for turbulent boundary layer control		9
74	A flexible MEMS technology and its first application to shear stress sensor skin		8
73	A novel microinjector with virtual chamber neck		8
72	Dissipation scale and control of fine-scale turbulence in a plane mixing layer. *Journal of Fluid Mechanics*, **1996**, 320, 139	3.7	8
71	An Alternative Look at the Unsteady Separation Phenomenon **1986**, 165-178		8
70	Continuous Adaptive Population Reduction (CAPR) for Differential Evolution Optimization. *SLAS Technology*, **2017**, 22, 289-305	3	7
69	Three dimensional tubular structure self-assembled by vascular mesenchymal cells at stiffness interfaces of hydrogels. *Biomedicine and Pharmacotherapy*, **2016**, 83, 1203-1211	7.5	7
68	Optoelectronic reconfigurable microchannels. *Lab on A Chip*, **2012**, 12, 5086-92	7.2	7
67	A high-order alternating direction implicit method for the unsteady convection-dominated diffusion problem. *International Journal for Numerical Methods in Fluids*, **2012**, 70, 703-712	1.9	7
66	Flexible parylene-valved skin for adaptive flow control		7
65	Chaotic mixing in electrokinetically and pressure driven micro flows		7
64	Response of a split film probe under electrical perturbations. *Review of Scientific Instruments*, **1982**, 53, 1240-1245	1.7	7
63	Sound generated by a single cambered blade in wake cutting. *AIAA Journal*, **1976**, 14, 763-766	2.1	7
62	Harnessing Artificial Intelligence to Optimize Long-Term Maintenance Dosing for Antiretroviral-Naive Adults with HIV-1 Infection. *Advanced Therapeutics*, **2020**, 3, 1900114	4.9	7

61	System control-mediated drug delivery towards complex systems via nanodiamond carriers. *International Journal of Smart and Nano Materials*, **2010**, 1, 69-81	3.6	6
60	In situ infrared spectroscopic studies of molecular behavior in nanoelectronic devices		6
59	Out-of-plane permalloy magnetic actuators for delta-wing control		6
58	Characterization of a MEMS-Fabricated Mixing Device **2000**,		6
57	Microfluidic System for Biological Agent Detection **2000**, 159-168		6
56	Active Flow Control by Micro Systems. *Fluid Mechanics and Its Applications*, **1999**, 195-202	0.2	6
55	Use of Orthogonal Array Composite Designs to Study Lipid Accumulation in a Cell-Free System. *Quality and Reliability Engineering International*, **2016**, 32, 1965-1974	2.6	6
54	Accurate and Effective Live Bacteria Microarray Patterning on Thick Polycationic Polymer Layer Co-Patterned with HMDS. *RSC Advances*, **2012**, 2, 7673-7676	3.7	5
53	A long-term, stable hydrophilic poly(dimethylsiloxane) coating for capillary-based pumping **2010**,		5
52	SU-8 lift-off patterned silicone chemical vapor sensor arrays		5
51	Flow control by using high-aspect-ratio, in-plane microactuators. *Sensors and Actuators A: Physical*, **1999**, 73, 169-175	3.9	5
50	Polysilicon structures for shear stress sensors		5
49	A micro silicon hot-wire anemometer		5
48	Passive control of delta wing rock. *Journal of Aircraft*, **1993**, 30, 131-133	1.6	5
47	On the Feedback Phenomenon of an Impinging Jet **1979**,		5
46	MEMS transducers for aerodynamics - A paradigm shift **2000**,		5
45	Harnessing an Artificial Intelligence Platform to Dynamically Individualize Combination Therapy for Treating Colorectal Carcinoma in a Rat Model. *Advanced Therapeutics*, **2020**, 3, 1900127	4.9	5
44	When Medicine Meets Engineering-Paradigm Shifts in Diagnostics and Therapeutics. *Diagnostics*, **2013**, 3, 126-54	3.8	4

43	Interrogating cell signalling network sensitively monitors cell fate transition during early differentiation of mouse embryonic stem cells. *Science China Life Sciences*, **2010**, 53, 78-86	8.5	4
42	MEMS on bulk mechanical contour substrates		4
41	The PVC technique □a method to estimate the dissipation length scale in turbulent flows. *Journal of Fluid Mechanics*, **1997**, 352, 135-159	3.7	4
40	MEMS for aerodynamic control **1997**,		4
39	In-plane microactuator for fluid control application		4
38	Visualization of Shear Stress With Micro Imaging Chip and Discrete Wavelet Transform. *Journal of Fluids Engineering, Transactions of the ASME*, **2002**, 124, 1018-1024	2.1	4
37	Micro thermal shear stress sensor with and without cavity underneath		4
36	Reconfigurable Hydrophobic/Hydrophilic Surfaces Based on Self-Assembled Monolayers. *Materials Research Society Symposia Proceedings*, **2003**, 774, 581		4
35	Simultaneous determination of the potent anti-tuberculosis regimen-Pyrazinamide, ethambutol, protionamide, clofazimine in beagle dog plasma using LC-MS/MS method coupled with 96-well format plate. *Journal of Pharmaceutical and Biomedical Analysis*, **2019**, 168, 44-54	3.5	4
34	A Point-of-Care Micro-Laboratory for Direct Pathogen Identification in Body Fluids **2006**,		3
33	A Chaotic Micro-Mixer Using Magnetic Beads. *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2003**, 69, 2626-2632		3
32	Sensing and Control of Aerodynamic Separation by MEMS. *Journal of Mechanics*, **2000**, 16, 45-52	1	3
31	Parametric Effects on Lift Force of an Airfoil in Unsteady Freestream. *AIAA Journal*, **1996**, 34, 1085-1087	2.1	3
30	Microriblets for drag reduction **1995**,		3
29	Interactive Control of Wall Structures by MEMS-Based Transducers. *Fluid Mechanics and Its Applications*, **1996**, 413-416	0.2	3
28	Enzyme-Based Electrochemical Biosensor with DNA Array Chip **2000**, 509-512		3
27	Cellular Signaling Analysis shows antiviral, ribavirin-mediated ribosomal signaling modulation. *Antiviral Research*, **2019**, 171, 104598	10.8	2
26	Reconfigurable microfluidic pump enabled by opto-electrical-thermal transduction. *Applied Physics Letters*, **2013**, 103, 174101	3.4	2

25	Optoelectronic Heating for Fabricating Microfluidic Circuitry. *Advances in OptoElectronics*, **2011**, 2011, 1-10	0.5	2
24	The Lab-on-a-Chip Approach for Molecular Diagnostics **2010**, 21-34		2
23	Shear Stress Measuremens on an Airfoil Surface Using Micro-Machined Sensors.. *JSME International Journal Series B*, **1997**, 40, 265-272		2
22	. *Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS)*, **2008** ,		2
21	Path to bio-nano-information fusion. *Annals of the New York Academy of Sciences*, **2006**, 1093, 123-42	6.5	2
20	Surface Shear Stress Reduction with MEMS Sensors/Actuators in Turbulent Boundary Layers **2004**,		2
19	Studies of deionization and impedance spectroscopy for blood analyzer **2005**, 6003, 82		2
18	Electrical molecular focusing for laser induced fluorescence based single DNA detection		2
17	Silicon micromachining and its applications **1995**,		2
16	Micro/Nano Technology Systems for Biomedical Applications **2010**,		2
15	Design of Microfluidic Mixer Utilizing Pressure Disturbances **2006**,		1
14	The convergence of bio, nano, and information technology: When Worlds Collide. *IEEE Nanotechnology Magazine*, **2008**, 1, 18-21	1.7	1
13	An AC electroosmotic processor for biomolecules		1
12	Nano/micro technologies for single molecule manipulation and detection		1
11			1
10	Gryphon M3 system: integration of MEMS for flight control **2001**,		1
9	Sub-voxel light-sheet microscopy for high-resolution, high-throughput volumetric imaging of large biomedical specimens		1
8	Validation of a universal and highly sensitive two-dimensional liquid chromatography-tandem mass spectrometry methodology for the quantification of pyrazinamide, ethambutol, protionamide, and clofazimine in different biological matrices. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2020**, 1151, 122141	3.2	

List of Publications

7	Micro/Nano Fluidics Mechanics and Transducers **2012**, 45-69	
6	Optical pressure transducer. *Review of Scientific Instruments*, **1993**, 64, 1999-2002	1.7
5	Visualization and Detection of Wall Shear Stress using Micro Shear Stress Sensor and Discrete Wavelet Analysis. *IEEJ Transactions on Sensors and Micromachines*, **2000**, 120, 272-279	0.2
4	Mining Sequence Patterns from Wind Tunnel Experimental Data for Flight Control. *Lecture Notes in Computer Science*, **2001**, 270-281	0.9
3	Nano/Micro Technologies for Detecting a Single DNA Molecule **2003**, 477-493	
2	Control of Separated Flow on a Symmetric Airfoil **1988**, 515-524	
1	Near Field Pressure Fluctuations of a Circular Jet **1996**, 403-409	